

(12) **United States Patent**  
**Park et al.**

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(54) **DATA TRANSMISSION METHOD AND USER EQUIPMENT FOR THE SAME**

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(73) Assignee: **LG Electronics Inc.**, Seoul (KR)

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **12/538,514**

LG Electronics, "Corrections to the random access response reception." 3GPP TSG-RAN WG2 #62, May 5-9, 2008, p. 3, paragraph 5.1.4.

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(Continued)

(65) **Prior Publication Data**

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(74) Attorney, Agent, or Firm—Birch, Stewart, Kolasch & Birch, LLP

**Related U.S. Application Data**

(60) Provisional application No. 61/087,988, filed on Aug. 11, 2008.

(57) **ABSTRACT**

(30) **Foreign Application Priority Data**

Jun. 25, 2009 (KR) ..... 10-2009-0057128

A mobile communication technology, and, more particularly, a method for efficiently transmitting data stored in a message 3 (Msg3) buffer and a user equipment for the same is disclosed. The method of transmitting data by a user equipment in uplink includes receiving an uplink (UP) Grant signal from a base station on a specific message, determining whether there is data stored in a message 3 (Msg3) buffer when receiving the UL Grant signal on the specific message, determining whether the specific message is a random access response message, and transmitting the data stored in the Msg3 buffer to the base station using the UL Grant signal received on the specific message, if there is data stored in the Msg3 buffer when receiving the UL Grant signal on the specific message and the specific message is the random access response message.

(51) **Int. Cl.**

**H04L 12/56** (2006.01)  
**H04J 1/16** (2006.01)

(52) **U.S. Cl.** ..... **370/278; 370/329; 370/412**

(58) **Field of Classification Search** ..... **370/329, 370/412, 278**

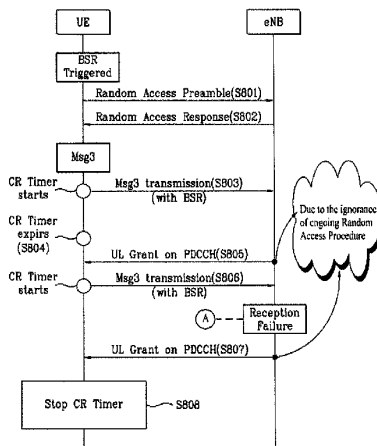
See application file for complete search history.

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**13 Claims, 10 Drawing Sheets**



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FIG. 1

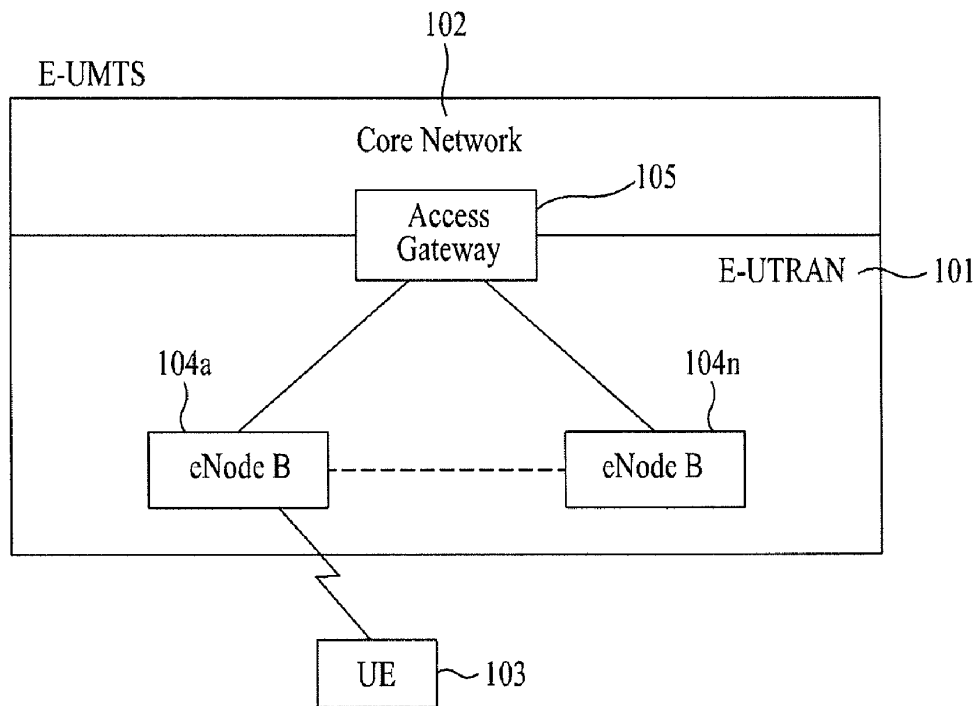


FIG. 2

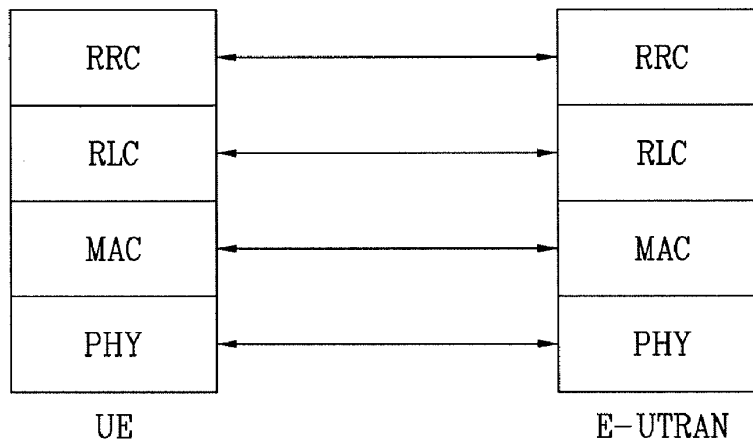


FIG. 3

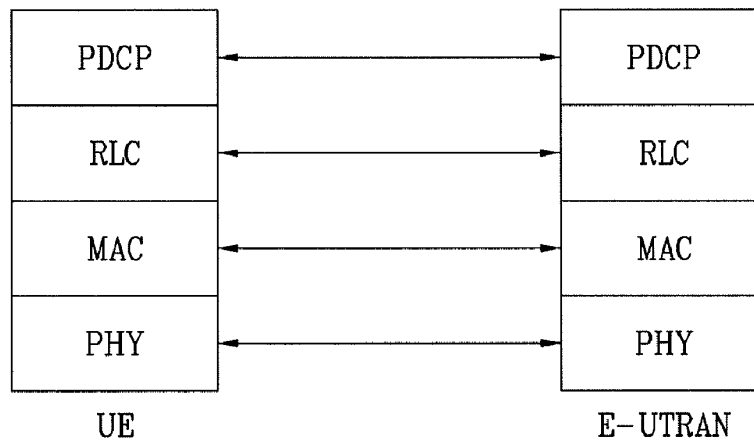
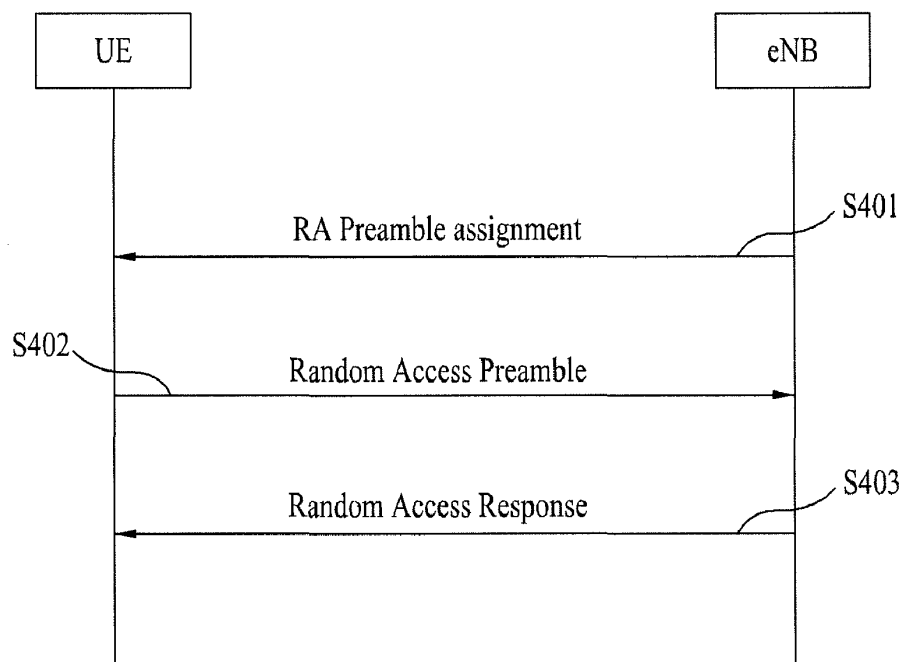


FIG. 4



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